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ABSTRACT

Results of a study designed to explore the construct validity of the Change Facilitator Style Questionnaire (CFSQ) as a measure of the aspect of a principal's leadership style that includes leader behavior and combinations of behavior influenced by such things as belief systems, and knowledge and attitudes about leadership. The sample consisted of all teachers in 94 schools in 6 districts in Louisiana. Usable data were received from 1,921 teachers from elementary schools and secondary schools during the spring of 1992. Factor analyses of the responses fail to confirm the six biploar subscales of the CFSQ or the three dimensions of the principal change facilitator style construct as previously described in the literature. The CFSQ appears to measure reliably a unidimensional construct of change facilitator style termed proactive/strategic leadership. As a unidimensional construct measure, the CFSQ demonstrates reasonable construct validity and high reliability. Implications for understanding planned organizational change in schools are discussed. Three tables present study data. (Contains 65 references.) (SLD)

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An Empirical Examination of Construct Validity Using the Results of Large-Scale Factor Analyses

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Principal Change Facilitator Style: An Empirical Examination of Construct Validity Using the Results of Large-Scale Factor Analyses

Introduction

Contemporary approaches to organizational theory have recognized the complex and interactive nature of schools and depict schools as complex social systems concerned with both institutional and individual dimensions of organizational functioning (Lipham, 1988). In addition, the recent education literature characterizes American public education by frequent and recurring calls for educational reform (Murphy, 1989; Cuban, 1990). Thus, while schools are recognized as complex social systems, they are frequently faced with reform initiatives intended to change key elements of their structures and/or functions. Within, this context, teachers have often been characterized as resistant to change and rigid in their conceptions of organizational roles (Giacquinta, 1973; Hopkins, 1990), while principals have been described as having substantial influences on effective positive school change and outcomes (Bossert, Dwyer, Rowan & Lee, 1982; Duke, 1986; Foster, 1986; Hallinger & Murphy, 1985; Hall & Hord, 1987; Sergiovanni, 1986, 1987).

A considerable body of recent literature (Corbett, Firestone & Rossman, 1987; Darling-Hammond, 1990) has documented the importance of understanding teachers' responses to change and has depicted teachers' initial responses to change efforts as influenced by organizational role and status perceptions and beliefs about "who we are" and "how we do things around here." The significant and influential role of principals has also been documented as critical to bringing about change and instrumental to the complex processes of effecting school improvement and organizational change (Anderson, 1990; Blumberg & Greenfield, 1986; Brookover, Beamer,

Efthim, Lezotte, Miller, Passalacqua & Tornatzy, 1982; Fullan, 1985, 1991; Edmonds, 1979; Ellett & Walberg, 1979; Hall & Hord, 1987; Hallinger & Murphy, 1985; Leithwood & Montgomery, 1982).

One variable that has received recent attention in the principal behavior and school change literature is principal change facilitator style (CFS). This construct has been typically defined as a specific aspect of principal's leadership style which includes leader behaviors and combinations of behaviors that are influenced by factors such as individual belief systems, orientation toward organizational roles, knowledge, concerns regarding the leadership role, tone with which behaviors are evidenced and other factors, as well (Chauvin, 1992; Hall, 1987; Rutherford, 1988). In an attempt to operationalize this leadership construct, Hall and his colleagues developed a classification scheme that employs three prototypic change facilitator styles: Initiator, Manager, and Responder (Hall, 1987; Hall & George, 1988; Hall & Vandenberghe, 1987; Hall & Hord, 1987).

The Change Facilitator Style Questionnaire (CFSQ) (hall & Vandenberghe, 1987) has been developed to identify change facilitator styles and combinations of styles of school principals. The CFSQ has been used in a variety of research and development studies (Hall & Hord, 1987; Hall & George, 1988) and has been piloted in diverse cultural settings (e.g., Belgium, United States, Australia). One critical assumption of the CFSQ is that the CFS construct can be understood in terms of a set of specific sub-constructs (Initiator, Manager, Responder), and that these sub-constructs are important and meaningful in the study of school principals and in future school change and improvement research.

Purpose

This paper presents the results of a study designed to explore the construct validity of the CFSQ (Hall & Vandenberghe, 1987) as a measure of principal change facilitator style. The results of the study are discussed in view of understanding the future role of school principals as change agents in schools and within the context of schools as complex social systems. Discussion is also focused upon the implications of the findings for conceptualizing and defining what the construct of change facilitator style means as applied to school principals.

Review of the Literature

Initial responses to reform initiatives and subsequent experiences resulting in implementation of planned change efforts in states such as Utah, South Carolina, and most recently, Louisiana, seem to support the importance of individual beliefs, perceptions and attitudes for building positive receptivity toward change. Others (e.g., Chauvin & Ellett, 1990; 1991; Chauvin, Evans, & Ellett, 1992; Chauvin, Ellett, Claudet, Loup, Lofton, & Hill, 1990; Chauvin, Lofton, Loup, Evans, Hill, Claudet & Ellett, 1991; Cohen & Ball, 1990; Darling-Hammond, 1990; Firestone & Corbett, 1988; Giacquinta, 1973; LaMaster, Tobin & Bowen, 1990, Richardson, 1990; Tobin, 1990; Waugh & Punch, 1987) have echoed similar views regarding the role of teachers' and principals' beliefs and perceptions in effecting organizational change.

Although teachers seem to be gaining recognition in the reform/change initiative literature (Darling-Hammond, 1990), the attention given to the key roles played by school principals has not diminished. Principals have long been viewed as instrumental in the complex process of effecting school improvement or school organizational change (Bossert, et al., 1982; Brookover,

et al., 1982; Ellett & Walberg, 1979; Fullan, 1985, 1990; Hall & Hord, 1987; Hallinger & Murphy, 1985; Halpin & Croft, 1963). Yet, even with the proliferation of research and developmental activities focused on understanding effective principal/leadership behaviors or style, the concept is not clearly understood (Murphy, 1988; Wimpleberg, Teddlie, & Stringfield, 1988). Today, schools continue to be faced with calls for change. Therefore, there is a need to better understand elements of effective leadership, particularly as these relate to school principals and school organizational change. The school/organizational effectiveness and school improvement literature offers a general basis for understanding effective leadership behaviors.

Principal Role in Organizational Change

A number of studies have pointed to particular principal behaviors as being more or less effective in facilitating specific innovations or planned organizational change (Anderson, 1990; Evans, 1988; Hall, Rutherford, Hord & Huling-Austin, 1984; Thomas, 1978). Others have suggested that not all school contexts call for the same set of behaviors in order to become "effective". For example, Hallinger and Murphy (1985) and Wimpleberg, et al., (1989) have suggested that greater sensitivity to school context is needed to determine effectiveness of leader behavior. Ellett and Walberg (1979) and Pitner (1988) depict models which recognize the importance of attitudes, beliefs, and behaviors of others (e.g., teachers, support staff, students, parents, etc.) as well as organizational/contextual characteristics (e.g., resources, district organizational structure, external environmental pressures, etc.) in shaping principal behavior within school contexts. Chauvin (1992) discusses a model of planned organizational change processes in schools that also recognizes these factors and the role of principal behavior in

effecting change outcomes. Bossert, et al. (1982) have questioned which comes first: the instructionally effective principal or the instructionally effective school.

Others have suggested that personal characteristics may play a more important role in determining leader behavior than originally thought. For example, Greenfield (1982), Pitner (1988), and Smith and Andrews (1989) suggest that a renewed interest in personal variables (e.g., beliefs, attitudes, values, and perceptions), and how these interact with situational or contextual, organizational variables, may prove fruitful in describing and explaining administrator behavior and organizational effectiveness as well. Still others (e.g. Murphy, 1988; Pitner, 1988; Rutherford, Hord & Huling, 1983) suggest that many questions about effective leader behaviors have remained largely unanswered because previous studies have tended to simultaneously focus too broadly on all aspects of the principal's work. Despite the difficulty in identifying specific leader behaviors linked to effectiveness, findings reported in the school effectiveness research clearly support the key role played by the principal in the school improvement process (Anderson, 1990; Brookover, et al., 1982; Edmonds, 1979; Hall, 1987).

Research Related to Principal Change Facilitator Style

Hall & Hord (1987), Leithwood & Montgomery (1982), and Thomas (1978) have specifically focused on investigations of what principals do that is more or less effective in achieving desired school outcomes and in moving schools toward greater organizational effectiveness and excellence. Thomas (1978) conducted a study of principals' behaviors in more than 60 schools that were involved in implementing a wide variety of alternative programs. Each school was involved in implementing at least one new program, while others were simultaneously implementing more than one program. Principals in this study were reported as exhibiting

particular patterns of behaviors related to facilitating implementation of the alternative program(s) in their schools. Observed patterns of behavior resulted in the development and classification of three distinct sets or patterns of principal behaviors (i.e., leadership styles): Director, Administrator and Facilitator.

Directors were described as principals who were highly involved in all aspects of the school organization (i.e., ranging from instructional [teaching, curriculum] and managerial [budget, resource allocation and scheduling]). While teachers in these schools were involved in making decisions related to classroom issues, the Director principals retained final decision making authority. Administrators tended to identify more with central office administration than with their own school faculties. They made decisions pertaining to the total school organization, but allowed teachers extensive autonomy when it came to classroom matters. Facilitators seemed to be more concerned with developing and maintaining positive interpersonal relations with faculty and staff. These principals perceived themselves as colleagues of teachers and placed high emphasis on providing support and assistance. Teachers in these schools were allowed much involvement in decision making.

Results of Thomas' (1978) study revealed that many factors influence program implementation, but the leadership of the principal was among the most important. Schools led by either Director or Facilitator style principals were more successful in implementation of alternative programs, than were schools led by Administrator style principals. In schools where strong leadership was not evident, implementation of alternative program(s) gradually drifted from the original design and resulted in great diversity among classroom practices.

At about the same time, similar, yet independent, research was being conducted by Hall and his colleagues at the University of Texas at Austin. Hall, Hord and Griffin (1980), in the first of a series of studies, reported findings from nine mini-case studies of principals that support differences among the way principals view their role and priorities. They also concluded that these principals operationalized their roles in terms of what they actually do in their day-to-day activities. Subsequent to this first investigation, Hall, Rutherford and Griffin (1982) identified three leadership styles that were specifically framed within the organizational context of change.

Hall and Hord (1987), for example, have developed a useful classification scheme of three change facilitator styles: Initiators, Managers, and Responders. Initiator style principals have been described as the most effective of the three types. Initiator style principals are also characterized as: 1) having a clear sense of vision, 2) being directly and intensely involved in change efforts, and 3) communicating clearly-defined goals and high expectations. Manager style principals are characterized as being concerned with maintaining good interpersonal relations and smooth administration of the school. Responder style principals are described as deferring decisions and discretion to others and acting in ways that are reactive, rather than goal-oriented. Detailed descriptions of these three prototypic styles are included in Appendix A.

Hall and his colleagues, in their identification and refinement of these leader styles specifically focus on patterns of behavior, underlying motivations and role orientations related to change facilitation, rather than on the broader spectrum of possible leader behaviors. They argue that understanding the motivation or belief system behind behaviors is an important consideration in determining overall style. Thus, in addition to the total combination of a large

number of behaviors, Hall also considers elements of personality, attitudes, perceptions, and orientations as important elements of change facilitator style and facilitating change.

Identification of these leader styles reflected specific patterns of behaviors, underlying motivations and role orientations related to change facilitation, rather than the entire and broad spectrum of possible effective leader behaviors. As explained in Hall and Hord (1987), these leadership styles are distinctly different from just sets of discreet behaviors. Hall and Hord (1987) specifically differentiate between behavior and style, stating that reliance on a particular behavior or set of specified behaviors is insufficient in representing an overall style.

Drawing on research by others (e.g., Fiedler, 1978; Tannenbaum and Schmidt, 1958), Hall and his colleagues argued that understanding the motivation or belief system behind behaviors is an important consideration in determining overall style. In addition to the total combination of a large number of behaviors, these researchers also considered elements of personality, attitudes, perceptions, and orientation as they relate to facilitating change in determining an overall style. Rutherford (1988) added that an individual's change facilitator style is also influenced by one's "concerns about the facilitator role, his [sic] knowledge base for the role and the tone that permeates his [sic] behaviors" (p.12). In essence, change facilitator styles include each of these elements that combine to form a gestalt of style.

Other studies have been conducted and findings have been supportive of the three change facilitator styles (e.g., Rutherford, 1981; Hord, 1981). One of the major contributions to the development of a framework for assessing principals' change facilitator styles was a year-long study involving nine schools, in three different school districts in three different regions of the country, with each school implementing a different educational innovation. Within each school

district, three schools were identified as having a principal judged to represent the different change facilitator styles under study. Once again, quantitative and qualitative data analyses yielded findings consistent with and clearly supportive of the existence of the three change facilitator styles. Significant relationships were found between the change facilitator styles and the degree to which implementation had been successfully achieved at the classroom level (Huling, Hall, Hord & Rutherford, 1983). These three change facilitator styles, Initiator, Manager, and Responder, have been conceptually defined by Hall, et al. (1984) (see Appendix A).

Hall, et al. (1984) have provided a set of descriptive dimensions or indicators to more accurately reflect the different aspects of "concerns, motivation, tone and behavior" (p. 25) for each of the three change facilitator styles. However, these authors caution that neither the paragraph descriptions nor the indicators are intended to capture all possible change facilitator styles. Results of descriptive and quantitative data analyses obtained in the series of studies conducted by Hall and his colleagues suggested combination styles, as well as examples of each single style (e.g., Initiator, Manager, and Responder).

Hall and his colleagues did not attempt to identify relationships between student achievement or other indices of school effectiveness and the three change facilitator styles. They contend that successful change has been observed with each style, the context being an important determinant of which style best suits the situation. Also, determining the best suited style for the situation depends upon the criteria used for defining effectiveness. However, results of studies conducted by Hall and his colleagues have consistently indicated that schools with

Initiator style principals implement more innovations than do those with Manager or Responder style principals.

Others have investigated principal change facilitator style in school-based studies. Seibel (1986) used an instrument to measure principal change facilitator style developed by Bost and Ruch (1985) based on the conceptual framework developed by Hall and his colleagues. She investigated the relationship between teachers' perceptions of principal change facilitator styles, perceived school climate (i.e., teachers' perceptions of the relationships among teachers and between teachers and the principal in the school) and student achievement. While the study was limited to a single school district in Virginia, results support various principal behaviors to be fairly evenly distributed across the three styles identified by Hall and his colleagues. Also, results of the Seibel (1986) study indicated that teachers' perceptions of principal change facilitator style were similar at elementary, middle and secondary school levels and reflected combination styles rather pure types. More teachers perceived their principals as either Initiators and/or Managers than Responders.

Seibel (1986) reported a negative relationship between the Responder style and school climate, while teachers' perceptions of their principals as Initiator and Manager styles were positively associated with positive and open school climates. Although relationships between student achievement and change facilitator styles were a target of this study, no significant relationships were identified, controlling for socio-economic status and ability. However, a strong negative relationship between student achievement and the Initiator style at the middle school level was reported.

Evans (1988), investigated teachers' perceptions of principal change facilitator style in schools that differed according to socioeconomic status (SES) and school effectiveness. With a sample of 53 elementary schools located throughout Louisiana, Evans identified significant differences in teachers' perceptions of principal change facilitator style in different types of effective and ineffective schools at various levels of socioeconomic status. Three other significant relationships were noted:

1) a significantly higher incidence of perceived Responder principals in less effective schools;

2) a significant difference between teachers' perceptions of the principal's change facilitator style in more effective versus less effective low SES schools;

3) a significant difference between more effective and less effective schools with principals in more effective schools demonstrating more initiating behaviors (No significant interactive effects were identified due to effectiveness and SES variables).

Evans also reported that principals were perceived by their teachers as demonstrating combination change facilitator styles, rather than pure types. Results supporting perceived combination styles reported by teachers suggest a continuum nature of the change facilitator styles consistent with conclusions reported by Hall and Hord (1987). That is, based on the average percent of Initiator, Manager and Responder responses obtained from teachers in a school, a principal perceived as predominantly an Initiator, was reported the next most frequently as having a Manager style. Principals perceived as predominantly Responders, evidenced secondary styles of Manager.

Additional work has continued in the study of principal change facilitator styles, particularly in the development and refinement of measures to assess change facilitator style variables. Hall, Vandenberghe and George have recently pursued collaborative efforts to continue the conceptual development and measurement of the change facilitator style construct (Hall, 1988; Hall & George, 1988; Vandenberghe, 1988). Hall (1988) and Hall and George (1988) raise questions regarding the utility of prior change facilitator style conceptions as existing along a continuum in fully explaining the context-specific and stylistic nature of principal change facilitator style. Secondary analyses of research data and continued investigations in the refinement of these constructs reveal variation among principals in the "quality, character and focus" (Hall, 1988, p. 7) of observed principal behavior.

As conceptualized by Hall and his colleagues, each change facilitator style represents elements of administrative efficiency and concern for people, but the blending or combining of behaviors/variables reflected in these two dimensions of change facilitator style for each type (Initiator, Manager and Responder) has been observed to be different (Hall, 1988; Hall & George, 1987). Hall (1988) contends that change facilitator style might be measured more accurately using bipolar scales to reflect combinations of styles, rather than a single cumulative measure that reflects simply more or less of administrative efficiency and concern for people. This suggestion to expand the change facilitator typology to reflect combination styles seems consistent with findings reported by Evans (1988) and Seibel (1986).

More recently, Hall (1987, 1988) suggests that a two dimensional model (administrative efficiency and concern for people) is inadequate for conceptualizing change facilitator style. Based on continuing efforts in leadership research (e.g., Duke, 1986; Schon, 1983, 1986;

Sergiovanni, 1986), as well as ongoing and intense involvement with principals in change facilitator studies, Hall (1987, 1988) has incorporated a third dimension, strategic sense, that reflects a time perspective and a professional reflection component now prevalent in both teacher effectiveness and principal effectiveness research.

According to Hall (1987), analyses of documented principals' actions reveal that Initiator style principals think about their roles in very different and special ways, than do Manager and Responder style principals. For example, he concludes that Initiator style principals examine their roles as instructional leaders more closely, more critically and in ways that are highly consistent with descriptions of teachers processing their own teaching, than do Manager and Responder style principals. Initiator style principals act in ways that reveal knowledge of the connectedness between day-to-day events and long-term vision and goals held for the school. Responder style principals have not been observed to think in these ways, while the Manager style principal seems to hold a more middle-focused perspective, described by Hall (1987) as task-oriented and tactical in nature.

Within the assessment framework developed and used as a basis for the Change Facilitator Style Questionnaire (Hall & Vandenberghe, 1987), Hall (1987) operationally defines the dimension of Strategic Sense in terms of two bipolar conceptions of Day-to-Day and Vision and Planning. Initial validation studies for this third dimension, Strategic Sense, have involved concurrent, cross-cultural investigations and results are reported as encouraging (Hall & George, 1987; Vandenberghe, 1988). Hall (1987) describes this third dimension, Strategic Sense, with the following working definition:

> To varying degrees principals keep in mind an image of the long term view and its relationship to the monthly, weekly and daily activities of themselves and their school. Some principals are more "now focused", while others think and act with a vivid mental image of how todays [sic] actions contribute to accomplishing long term goals. Some are reflective about what they are doing and how all of their activity can add up, while others focus on the moment to moment, treating each event in isolation from its part in the grand scheme. This visioning encompasses the entry and role of external facilitators too. In some settings external facilitators can enter schools as they wish, while in other settings the principal encourages/discourages their entry and prescribes their role (p. 17).

Consistent with earlier conceptions of change facilitator styles, Hall (1987) and Hall and George (1988) reiterate distinctions between discreet behaviors and style. They contend that changes in specific behavior(s) may be observed in principals facilitating change, but style remains fairly stable and is difficult to change. Anderson (1990), in a two-year study of principals' management styles across multiple innovations, reports findings to support the longevity of principal change facilitator style over minor changes in behavior. Thus, it seems that principals, like teachers, hold particular conceptions, beliefs and orientations toward their roles in schools. In terms of models of leadership style (Ellett & Walberg, 1979; Pitner, 1988) and planned organizational change processes in schools (Chauvin, 1992), these beliefs and role orientations, in turn, seem to significantly influence the principals' leadership style. As principals and teachers interact, their respective role orientations may reciprocally influence perceptions and resulting behavior (e.g., teacher receptivity to change and/or implementation of innovations and principal change facilitator style). As a measure of principal leadership style

within the specific context of planned organizational change in schools, the CFSQ was the focus of this study. Investigation of the construct validity of the CFSQ as a measure of principal change facilitator style seems important to the expansion of understanding the role of principal leadership style in facilitating positive school change processes and effecting desired school outcomes.

Methodology

Sample

The sample in this study consisted of all teachers in 94 schools within six school districts within the southern region of Louisiana. The school sample closely reflected the statewide distribution of all schools by level (elementary, 57%; middle, 15%; secondary, 17%) and by socioeconomic status. Schools included in the sample were from urban/city, suburban, and rural/sparsely populated settings. The student population for individual schools in the sample ranged from 48 to 1293, and faculty size ranged from 10 to 85. Socio-economic status (SES), as reflected by the total percentage of students eligible for free or reduced cost lunches in each school, ranged from 0% to 98%, with the higher percentage representing the lower SES levels. Useable data were received from 1921 teachers (overall response rate of 62.33%) during the spring of 1992 as part of an instrument packet distributed to teachers in 94 schools (52 elementary, 18 middle, 24 secondary. At least 40% of the teachers in each of 81 schools (86.17%) responded to the complete CSFQ.

Data Collection

Data regarding teachers' perceptions of principal change facilitator style and teachers' self-perceptions of their receptivity to change were collected using the Change Facilitator Style Questionnaire (CFSQ) (Hall & Vandenberghe, 1987) as part of a larger instrument booklet.

Packaging and Distribution Procedures

The CFSQ was distributed in booklet form to teachers in individual questionnaire packets. Each questionnaire packet contained a demographic information questionnaire, an instrument booklet, appropriate cover letters and specific directions for completing and returning questionnaire packets to the researcher.

Individual teacher questionnaire packets were packaged by school and distributed to participants using intra-district mail systems. A district-level contact person was identified in each school district office to facilitate distribution and collection of questionnaire packets. Detailed instructions for distribution, collection and maintenance of confidentiality were provided to all district contact persons, as well as the principal and designated school contact person in each participating school.

Data Collection Timelines

Data were collected in March, 1992. Teachers were asked to complete the questionnaire packets within five (5) working days. At each school, the principal was asked to designate an individual (school contact person) such as the school librarian, school counselor or grade level chairperson to help distribute and collect completed questionnaire packets.

Confidentiality of Responses

Principals were encouraged to select an individual as the school contact person who would be perceived by teachers in the school as one who would protect the anonymity of their responses. To emphasize confidentiality of teachers' responses, great care was taken to ensure that principals were not directly involved in the process of distributing or collecting questionnaire packets. This information and specific directions for the school-level designee were shared with each principal through letters included in the school package of questionnaire packets. In a cover letter included with each questionnaire packet, teachers were asked to place their completed questionnaires in the envelope provided and to seal the envelope before returning it to the school contact person. Approximately three days following initial distribution of questionnaire packets within each school, each participant received a written reminder. Duplicate copies of the reminder notice were included in each school package of materials.

All sealed questionnaire packets were packaged by the school-level designee and returned to the district office where they were collected by the researcher. In a few instances, follow-up telephone calls and/or visits to a school or school district were necessary to retrieve school packages of questionnaire packets.

Instrumentation

The Change Facilitator Style Questionnaire (CFSQ) as originally developed by Hall and Vandenberghe (1987) consists of three dimensions (Concern for People, Organizational Efficiency, and Strategic Sense), each of which contains two bipolar scales consisting each of five items, for a total of thirty instrument items (statements). Teachers are asked to respond to each item using a six-point, Likert-type scale ranging from 1=Never or Not True to 6=Always

or Very True. The response set for teachers is consideration of the principal's behavior in relation to a school program innovation(s) and change efforts. Scores on the bipolar scales can range from 5 to 30, with high scores indicating a greater degree of the scale characteristic than low scores. Alpha reliabilities of the CFSQ bipolar scales are reported by Hall and George (1988) to range from .82 (Informal/Social, Concern for People) to .94 (Vision and Planning, Strategic Sense).

Data Analyses

Descriptive Statistics

Summary statistics were completed for the CFSQ. Means, standard deviations, ranges and mean scores expressed as percentages of the maximum possible score were aggregated and reported for all teachers and by school level.

Factor Analyses

The CFSQ had previously undergone extensive factor analyses as part of instrument development activities, and in conjunction with its use in prior research studies. However, a review of these analyses revealed, in most cases, that sample sizes previously used were substantially smaller than the sample size in this study. In this study, efforts to examine the conceptual framework undergirding the CFSQ through factor analyses (SAS Institute, 1985) were conducted in an attempt to verify the conceptual bases previously established in prior research involving the CFSQ.

For each measure, a series of factor analyses were completed. Using principal components analysis, orthogonal and oblique rotation techniques (Promax, SAS Institute, 1985), unconstrained solutions were generated, followed by orthogonal and oblique rotation techniques

interactively extracting appropriate factors, based upon an examination of factor eigenvalues. Examination of scree tests, factor loadings, eigenvalues, variances explained and conceptual fit of the items with each factor were also used in determining the best and most reasonable representation of the data for each measure.

In particular, comparisons of solutions obtained using principal components analyses, orthogonal and oblique rotation techniques were made. In instances where factor analyses suggested reconstruction of the original version of the CFSQ, conceptual fit of the data and consideration of reliability concerns contributed to subsequent decisions to retain a one-factor principal components solution, or a particular orthogonal or oblique solution. While oblique solutions do not assume complete independence among factors, they were considered as solutions that perhaps offered a more reasonable representation of data for the CFSQ when concern for the number of items retained on an instrument was a factor. In such instances, analyses of inter-factor correlations were also completed.

A set of decision rules was established and used for the CFSQ in interpreting the results of these factor analyses and determining solutions which best represented the data. An item was retained using the following decision rules as a guide: 1) only if its loading on a given factor was greater than or equal to .30; 2) only on the factor for which its loading was the greatest; 3) only if it loaded primarily on one factor; and 4) if, when loading on multiple factors, the difference between loadings was greater than or equal to .20.

Factor pattern matrices were examined for one-factor principal components and orthogonal solutions, while factor structure correlation coefficients were analyzed for oblique solutions. In these instances, factor loadings can be interpreted as Pearson product-moment

correlations. That is, the higher an individual item loading, the stronger the statistical relationship between the item and the factor on which it was retained.

Based upon results of a variety of factor analyses, decisions were made to either retain the original operational definition of the construct, or to reconstruct the scale. In all factor analyses completed, teachers were used as the units of analysis.

Prior to the initiation of factor analyses for the CFSQ, all data were examined for missing or duplicate teacher responses. In instances where missing or erroneous data were noted, grand item means were substituted for teachers' responses to maximize the number of useable cases available for analysis.

Reliability Statistics

Cronbach Alpha reliability procedures (SPSS, Inc., 1988) were used to examine the internal consistency reliability of the CFSQ. Calculations of reliability coefficients were completed using teachers as the units of analysis . Analyses were completed for all teachers (n=1921), as well as for teachers in schools that had at least 15 teacher respondents (n=59 schools).

Results

The CFSQ (Hall & Vandenberghe, 1987) was originally designed for use with teachers as a measure of the underlying dynamics of principals' leadership behavior related to implementation of classroom level changes in schools. A variety of factor analyses were conducted with the CFSQ Before proceeding with analyses of the data, grand item mean scores were substituted for missing or erroneous data (3.3% of the sample).

Factor Analyses

Results of factor analyses with the CFSQ are summarized in terms of two levels of analyses: 1) Factor analytic studies were conducted in an attempt to confirm the change facilitator style construct as multi-dimensional and the conceptual bases for the six bi-polar subscales of the CFSQ; and 2) Based upon results of these initial factor analyses, the data were re-examined and a second series of factor analyses was completed to investigate the change facilitator style construct in terms of either three unidirectional dimensions reflected in the CFSQ or as a unitary construct.

Level I: Initial Factor Analyses

Principal components analysis. Using principal components analysis, orthogonal and oblique rotation techniques (Promax, SAS Institute, 1985), an initial unconstrained factor solution yielded three factors. Based upon final communality estimates, the three-factor unconstrained solution accounted for 56.50% of the variance in the data. Subsequently, a series of factor analysis solutions using both orthogonal and oblique rotations (Promax, SAS Institute, 1985) were completed iteratively extracting from one to six factors in an attempt to verify the six bi-polar subscales of the CFSQ.

Orthogonal and oblique solutions. Results of the initial factor analyses did not confirm the six subscales of the CFSQ as distinct constructs relating to change facilitator style. In the orthogonal (Varimax) and oblique (Promax) solutions, no items loaded on Factor VI, and only two items loaded each on Factors III, IV, and V.

Level II: Second Series of Factor Analyses

The content of the CFSQ was re-examined and selected items were reverse-scored to permit further investigation of the change facilitator style construct. Reverse-scored items have been identified in Table 1. These data were then submitted to a series of principal components factor analyses utilizing both orthogonal and oblique rotation procedures (Promax, SAS Institute, 1985).

Given the decision rules previously described, factor solutions involving four, five and six factors for utilizing orthogonal and oblique rotations did not satisfactorily represent the data. Results of analyses pertinent to the orthogonal and oblique rotation techniques for three-factor and two-factor solutions as well as the one factor principal components solution, are summarized as follows.

Orthogonal solutions. Examination of the three-factor orthogonal solution (Varimax, SAS Institute, 1985) revealed 27 of 30 items loading on a single factor. In this solution, the first factor (14 items) accounted for 28.17% of the variance in the data. The second factor (8 items) accounted for 16.91% of the variance in the data, while the third factor (5 items) accounted for 10.88% of the variance. Based upon the final communality estimate, the total percentage of explained variance in the data resulting from the this solution was 56.50%.

The two-factor orthogonal solution (Varimax, SAS Institute, 1985) showed that 22 of 30 items loaded on a single factor. In this solution, the first factor (16 items) accounted for 33.03% of the variance in the data, while the second factor (5 items) accounted for 19.11% of the variance in the data. Based upon the final communality estimate, the total percentage of explained variance in the data resulting from the this solution was 52.15%.

Oblique solutions. In the three-factor oblique solution, 21 of the 30 items (70%) loaded on a single factor. The remaining nine items loaded on more than a single factor at or exceeding .47. As shown in Table 1, the first factor consisted of 14 items, with factor loadings ranging from .69 to .85. The second factor consisted of four items, with factor loadings ranging from .57 to .72. The third factor consisted of three items loading at .68, .70 and .75. Based upon the final communality estimate for the three-factor solution, the total percentage of variance in the data explained by this solution was 56.50%. The percentage of explained variance in the data accounted for by the three factors was: I (42.03%), II (29.47%) and III (17.03%). Given these results and the nature of an oblique solution, there appeared to be some degree of covariance among the factors. To further examine the relative independence between the factors, intercorrelations between these three factors were computed.

A correlation of .62 was obtained between the first two factors, suggesting a moderate to moderately strong relationship between these two factors. Factor two and three appeared to be relatively independent, with an inter-factor correlation of (-.22). A correlation of (-.43) also suggested independence between factor one and factor three. Although items loading on each factor appeared to conceptually align to some degree, items loading on the first and second factor seemed to be opposing examples of the same concept, rather than defining distinctly different concepts. Based upon the content analysis of the items loading on each of the three factors, it was decided to further examine the conceptual framework of the CFSQ by analyzing and comparing the degree to which the data conceptually fit together in the one-factor and two-factor solutions.

Table 1

Summary of Factor Structure Coefficients (3 Factor Solution) for the Change Facilitator Style Questionnaire (CFSQ) (n=1921)

	3 Factor Oblique Solution		
CFSQ Item	I	II	III
1			
2	.75		
3	.77		
4	.78		
5[a]			
6	.69		
7[a]			
8	.77		
9	.79		
10[a]		.72	
11			
12			
13[a]		.57	
14	.85		
15	.73		
16[a]			
17	.79		
18	.75		
19			.75
20	.84		
21[a]			
22	.78		
23			

(table continues)

Table 1 (continued)

	3 Factor Oblique Solution		
CFSQ Item	I	II	III
24			.70
25[a]		-.72	
26			.68
27[a]			
28[a]		.66	
29	.79		
30	.84		
Variance Explained	42.03%	29.47%	17.03%
Total Variance Explained (3-Factor Solution)[b] = 56.50%			

[a] Item has been reverse-scored.
[b] Expressed as a percentage of explained variance in the data for the solution.

For the two-factor oblique solution, 18 of the 30 items (60%) loaded on a single factor. The remaining 12 CFSQ items loaded on both factors at or exceeding .57. For the 18 items loading on a single factor, factor loadings ranged from .42 to .77. Table 2 reflects the two factor solution in which the first factor consisted of 13 items, while the second factor consisted of five items. Factor loadings ranged from .42 to .77 and from .59 to .77, respectively. In the two factor oblique solution, the first factor in the solution accounted for 41.63% of the total explained variance in the data, while the second factor accounted for 30.36%. Based upon the final communality estimate, this solution accounted for 52.13% of the total explained variance in the data.

Inter-factor correlations were computed to determine the independence of these factors. A correlation of .57 was obtained for the two factors, suggesting that these factors were moderately related to one another. Content analysis of the items loading on each factor did not provide a clear conceptual explanation of the data in terms of change facilitator style.

One-factor principal components solution. For the one-factor principal components solution, all 30 items of the CFSQ (100%) loaded at or exceeding .31. As presented in Table 3, factor loadings ranged from .31 to .82, with 26 of the 30 CFSQ items loading at or exceeding .52. Based on final communality estimates, the percentage of total variance in the data explained by the one-factor solution was 44.80%.

Final Solution Retained/Interpretation

Analyses of the factor loadings and percentage of variance explained in the data, as well as an analysis of the content reflected in the items revealed that the one-factor principal components solution provided the best construct definition of change facilitator style as measured

Table 2

Summary of Factor Structure Coefficients (2 Factor Solution) for the Change Facilitator Style Questionnaire (CFSQ) (n=1921)

	2 Factor Oblique Solution	
CFSQ Item	I	II
1		.68
2		
3	.75	
4		
5*	.74	
6		
7	.74	
8	.75	
9		
10*	.64	
11		.77
12		
13*	.42	
14		
15		
16*	.71	
17		
18		
19		.61
20		
21*	.69	
22	.70	

(table continues)

Table 2 (continued)

	2 Factor Oblique Solution	
CFSQ Item	I	II
23	.62	
24		.59
25[a]	.61	
26		.64
27[a]	.77	
28[a]	.61	
29		
30		
Variance Explained[a]	41.63%	30.36%
Total Variance Explained (2-Factor Solution) = 52.13%		

[a] Item has been reverse-scored.

Table 3

Summary of Factor Structure Coefficients (1 Factor Solution) for the Change Facilitator Style Questionnaire (CFSQ) (n=1921)

CFSQ Item	1 Factor[b]
1	.58
2	.76
3	.75
4	.79
5[a]	.68
6	.70
7	.70
8	.76
9	.78
10[a]	.57
11	.64
12	.65
13[a]	.38
14	.81
15	.73
16[a]	.67
17	.74
18	.73
19	.31
20	.81
21[a]	.66
22	.77
23	.58
24	.31

(table continues)

Table 3 (continued)

CFSQ Item	1 Factor[b]
25[a]	-.52
26	.42
27[a]	.71
28	.56
29	.76
30	.82
Total Variance Explained[c]	44.78%

[a] Item has been reverse-scored.
[b] Principal components solution.
[c] Expressed as a percentage of the total explained variance in the data.

by the CFSQ. While CFSQ items may represent different perceived principal behaviors or style elements that might combine to reflect an overall principal change facilitator style, results of the factor analyses suggest that, as measured by the CFSQ, change facilitator style is a unitary construct perhaps best represented as proactive/strategic leadership within the context of planned organizational change in schools.

Reliability Analyses

Cronbach Alpha internal consistency reliability coefficients were computed for the reconstructed CFSQ (total instrument). Teachers were used as the units of analysis. An Alpha coefficient for the CFSQ for teachers was .95.

Alpha coefficients were also computed for the CFSQ for teachers in all schools with at least 15 teacher respondents (n=59). All 59 schools had Alpha coefficients above .60. Forty-three of the 59 schools had Alpha coefficients in the .90 - .99 range, while 13 had Alpha coefficients in the .80 - .89 range.

Discussion

The field of educational administration has be plagued by continued difficulties in developing sound measurement of principal leadership. Several factors have been cited as primary contributors to these difficulties: 1) research contexts have been either too broad (Hall, et al., 1982; Hall, et al., 1984; Rutherford, et al., 1983) or too diverse (Murphy, 1988; Wimpleberg, et al., 1989); 2) considerable variation in conceptual and operational definitions of effective principal leadership exist (Bossert, et al., 1982; Hallinger & Murphy, 1988; Murphy, 1988); 3) difficulties in accounting for dynamic and interactive elements in a variety of school organizational contexts that influence principal behavior are evident (Blumberg &

Greenfield, 1986; Ellett & Walberg, 1979; Lightfoot, 1983); and 4) personal variables that include personality and style must be considered (Blumberg & Greenfield, 1986; Greenfield, 1982; Lightfoot, 1983; Pitner, 1988).

Hall and his colleagues (Hall, et al., 1984; Hall & Hord, 1987) have conceptualized principal leadership style within the context of school change and they define this concept as change facilitator style. Prototypic principal change facilitator styles were originally conceptualized in terms of varying degrees of particular characteristics or behaviors along a unidimensional continuum (Hall, et al., 1980; Hall, et al., 1982; Rutherford, et al., 1983). However, Hall and Vandenberghe (1987) recently reconceptualized this construct as multidimensional, as measured by six bipolar subscales on the CFSQ. Initial validation studies conducted by Hall and George (1988) revealed encouraging results regarding the underlying dimensions measured by the CFSQ.

Although Hall and George (1988) reported initial reliability coefficients and intercorrelations that are supportive of the independence of the CFSQ subscales and dimensions, they also raise issues related to high intercorrelations between the subscales of Meaningful/Formal and Administrative Efficiency, Meaningful/Formal and Vision and Planning, and Administrative Efficiency and Vision and Planning. Their findings suggest that these subscales may be examples of a single construct, rather than separate and distinct independent constructs related to change facilitator style. Research has continued in the analysis of the conceptual framework of the CFSQ through additional factor analyses and cluster analysis (A. George, personal communication, December, 1991; G. Hall, personal communication, November, 1991).

Results of factor analyses completed in this study for the CFSQ failed to confirm the six bipolar subscales or the three dimensions of principal change facilitator style construct as previously described in the literature (Hall, 1987; Hall & George, 1988). Instead, the CFSQ appears to reliably measure a unidimensional construct of change facilitator style termed proactive/strategic leadership. Results of factor analyses in this study lead to the following conclusions: 1) change facilitator style, as measured by the CFSQ, is a unidimensional construct; 2) as a unidimensional construct measure, the CFSQ is best conceptualized as proactive/strategic leadership; and 3) as a unidimensional measure of proactive/strategic leadership, the CFSQ demonstrates reasonable construct validity and high reliability. These conclusions are discussed in detail in the two sections that follow: 1) conceptualizing and operationally defining principal change facilitator style, and 2) implications for understanding planned organizational change in schools.

Conceptualizing and Operationally Defining Variables

Planned organizational change can be characterized by diverse conceptions of related constructs, operational definitions and research designs. Clarity in the development of conceptual and operational definitions is fundamental to future research involving variables such as principal change facilitator style. Results of this study clearly suggest the need to re-examine and redefine the construct of principal change facilitator style that appears important to the development of comprehensive, theoretical conceptions of planned organizational change in schools. This suggests a two-step process that includes efforts to develop conceptual accuracy in describing these constructs, and sound measurement giving attention to construct validation, reliability, and other psychometric concerns.

As constructs related to principal change facilitator style are re-examined, particular attention needs to be given to developing comprehensive and clearly stated descriptions of the essential elements of conceptual definitions. A second consideration is assurance that the conceptual definitions are timely and reflect current professional thinking. Although the principal change facilitator style construct, as measured by the CFSQ, has been previously conceptualized as mulitdimensional, results of this study suggest a more parsimonious and unidimensional conception. Results in this study lead to a conclusion that the CFSQ, as a unidimensional and global measure of proactive/strategic leadership, may facilitate future investigations of change process in schools and contribute to the development of comprehensive, yet parsimonious, theoretical conceptions of planned change in schools. This conclusion is further supported by recent results of factor analyses of a similar measure (Bost & Ruch, 1985) that is also based on the conceptualization of principal change facilitator style reflected in the CFSQ (C. Teddlie, personal communication, August, 1992). In these recent factor analytic studies, Teddlie (personal communication, August, 1992) also reports results that support the principal change facilitator style construct as unidimensional.

Results in this study suggest that this construct might best be conceptualized in a broader sense to reflect proactive/strategic leadership. Although unidimensional and conceptually simpler than previously described in the literature, the CFSQ may reflect a more global and over-arching conception of principal leadership. As a measure of proactive/strategic leadership, three distinct aspects of effective principal leadership seem to be evident: 1) task structure, 2) consideration for people, and 3) strategic sense or vision. Thus, it seems that the CFSQ is more than just a measure of change facilitator style. This is not surprising, since development of the CFSQ was

initially grounded in earlier conceptions of effective principal leadership such as initiating structure and consideration (Halpin, 1966), as well as more recent conceptions of principal leadership effectiveness such as strategic leadership and vision (Foster, 1986a, 1986b; Sergiovanni, 1987). Therefore, it seems that a variety of future research efforts on principals' leader behavior may benefit from use of the CFSQ as a global measure of principal leadership.

Since all tests of validity and reliability contribute to construct validity (Messick, 1992), operational definitions developed to reflect particular constructs (e.g., principal change facilitator style) also need to be examined in ways to assure sound psychometric quality. Therefore, a second step in this process of conceptualizing and operationally defining variables involves completion of appropriate validity and reliability studies for various measures. Results obtained here seem to call for multivariate analyses (e.g., factor analyses), criterion-related validity studies, and reliability studies using more complex and balanced designs (e.g., generalizability theory).

Implications for Understanding Planned Organizational Change in Schools

Upon closer examination of the results and conclusions in this study, the conceptualization of change facilitator style is quite similar to essential elements or characteristics of principal leadership behavior often described as proactive and strategic principal leadership (Blumberg & Greenfield, 1986; Leithwood & Montgomery, 1982; Sergiovanni, 1986). Thus, the CFSQ appears to validly and reliably measure a principal leadership construct in a context of change that is often discussed in the literature as important in creating effective schools. This is encouraging, given concerns reflected by Murphy (1989) and others (e.g., Bossert, et al., 1982) regarding the conceptualization and measurement of effective principal leadership behaviors or

style. Thus, a positive contribution of this study to theory development of principal leadership and effectiveness is the construct validity and high reliability of the CFSQ as a simple and parsimonious conception of proactive/strategic principal leadership style.

In a recent study that investigated the relationships among principal change facilitator style (measured as a unidimensional construct using the CFSQ), teacher receptivity to change, and bureaucratic and professional orientations, Chauvin (1992) reports results that support the important and influential role of the principal for achieving organizational effectiveness. However, a major finding and contribution to the development of theoretical conceptions of planned organizational change in schools is the consistent, inverse relationship between teacher receptivity to cultural/normative change and principal change facilitator style. This finding contradicts prior results and conclusions of studies of relationships between principal leadership style and various aspects of change processes (e.g., teachers responses and behaviors during adoption, implementation, and incorporation stages).

While past studies have consistently evidenced positive relationships between principal leadership style (e.g., change facilitator style), implementation of educational innovations, and indices of organizational effectiveness (e.g., school climate, student achievement), results of this exploratory investigation (Chauvin, 1992) suggest the relationship between principal change facilitator style and teacher receptivity to cultural/normative change is negative. Thus, while the findings reported in Chauvin (1992) seem to confirm the importance of proactive/strategic principal leadership style in the change process in schools, they also suggest that the nature of relationships between principal leadership behavior and teachers' responses to change vary

according to the specific aspect of planned change that is targeted (e.g., receptivity to change versus implementation of planned change).

Hallinger and Murphy (1985) and Wimpleberg, et al. (1989), contend that the differentiating feature for understanding planned organizational change in schools may be the fit or complementary match among principal leadership style, school context variables, stages of change within the school organization, and the primary focus on change processes (e.g., receptivity to change during adoption versus implementation or receptivity to change during implementation). A parsimonious, unidimensional conception of proactive/strategic leadership, such as the CSFQ, would facilitate exploration of principal behavior within the context of change processes in schools and help to simplify the study of such complex phenomena. A global conception of principal leadership style would facilitate the ability to give more focused attention to the study of relationships between various context variables, principal leadership style, and elements of planned organizational change processes in schools.

Principals who are perceived as high in change facilitating behaviors (e.g., Initiators) may be most effective in certain school contexts, but not in others. For example, results of analyses in Chauvin (1992) revealed a negative relationship between principal change facilitator style and teacher receptivity to cultural/normative change for the total sample of schools and for samples of schools by school level (elementary, middle, secondary). However, results of the within-school analyses revealed positive relationships between principal change facilitator style and teacher receptivity to cultural change in some individual schools.

Results of analyses in Chauvin (1992) also suggest that teachers seem to perceive principal leadership style in global terms along a continuum that reflects frequent demonstration of many

proactive/strategic leadership behaviors to demonstration of infrequent and few proactive/strategic leadership behaviors. Teachers did not differentiate principal leadership style in terms of subcategories of leadership behaviors (e.g., Concern for People and Strategic Sense). Rather, teachers tended to perceive discrete principal leadership behaviors as reflective of an overall style or gestalt that was represented along a continuum from "a little" to "a lot" of proactive/strategic leadership style (e.g., low/Responder change facilitator style to high/Initiator change facilitator style).

Given the consideration of context features and specific aspects of the change process, there does not seem to be one generic set of effective leadership behaviors that is applicable in all situations. Based on the findings and conclusions of this study, findings reported in Chauvin (1992), and contributions in the literature on planned change and on principal leadership, it makes no sense to describe an effective change facilitator style or leadership style without qualifying it in terms of specific aspects of the change process (e.g., teacher receptivity to change) and the specific school context (e.g., school level). These findings raise a new set of questions regarding the paradoxical and perplexing nature of relationships between principal behavior and teacher responses to change that appear to be different for different indices of receptivity and implementation. They also suggest that future explorations of variables related to planned organizational change processes in schools might be enhanced by the use of a unidimensional and global measure of proactive/strategic principal leadership style, such as the CFSQ.

Given the positive relationship identified in past studies between these variables, it may be that change efforts that persist through later stages of planned change do so because of high

change facilitating behaviors. Similarly, these principal behaviors may be important in enhancing more positive receptivity toward a variety of change efforts (e.g., classroom-based innovations, school-wide improvements, school-level organizational change). Past studies of change have focused primarily on the implementation of educational innovations in schools at the classroom level (e.g., Anderson, 1990; Hall & Hord, 1987). However, Chauvin (1992) focused on large-scale, school level organizational changes. Thus, change facilitator styles may be differentially associated with various elements of change processes.

Recognizing the intractibility of effecting successful change across various school contexts, findings in this study and in Chauvin (1992) suggest that recent conceptions of strategic and cultural elements of principal leadership (Hall, 1988; Sergiovanni, 1986) may be even more critical to effecting long-lasting change than originally conceptualized. Characteristics of proactive and strategic leadership such as enduring focus and vision, and long-term commitment and drive may be critical for surviving initial responses or receptivity to systemic and cultural/normative changes and/or changing negative receptivity to positive receptivity. Said another way, proactive and strategic leadership style may be an essential key to altering organizational norms and values to ensure long-lasting change that is incorporated into the everyday life of schools. This leadership characteristic may also be an essential element of creating a culture for change (Foster, 1986; Joyce, 1990).

Cuban (1988, 1990) Fullan (1985, 1990) and Murphy (1989) suggest that there is critical need to carefully examine all aspects of planned organizational change as these occur throughout each stage of the change process. Thus, future investigations might focus on variables such as principal change facilitator style at different stages during the planned change process. From this

perspective, those concerned with leader behavior or style, change processes in schools, and school outcomes might more parsimoniously narrow their conceptual and measurement focus to a single construct, proactive/strategic leadership.

As a unidimensional measure of proactive/strategic leadership, the CFSQ can be useful in the development of theoretical frameworks for explaining planned organizational change in schools and principal leadership style. Also, a simpler theoretical conception of principal leadership that can accommodate a broad variety of school contexts seems preferable to more complex depictions of leadership style (e.g., Fielder, 1978; Hersey & Blanchard, 1988; House, 1974).

From a practical perspective, the six bipolar subscales of the CFSQ as described by Hall and Vandenberghe (1987) may have utility in communicating with practitioners (e.g., principals and teachers) and in facilitating school improvement activities. However, from both theoretical and measurement perspectives, the results of this study do not support the use of the six bipolar subscales or the three dimensions of the CFSQ. The results of this study suggest that principals' change facilitator style is better understood in terms of variation in a single style (theoretical construct) called proactive/strategic leadership (PSL). Understanding linkages between and other important school organization and outcome variables, and subsequent theory development to understand the meaning of schools as complex social systems using the CFSQ should be based on empirically derived, operational definitions of the principal change facilitator style construct. As previously noted, construct validation remains at the heart of good measurement and theory development (Messick, 1989). A single change facilitator style construct of proactive/strategic leadership has been identified here. It is recommended that subsequent research with the CFSQ

recognize its usefulness as a unitary leadership style measure, not a multi-dimensional one. Attempts to describe principal change facilitator style in more complex conceptualizations appear to await the development of more refined conceptual and operational definitions of this construct.

REFERENCES

Anderson, S. E. (1990). Principal's management style and patterns of teacher implementation across multiple innovations. Paper presented at the annual meeting of the American Educational Research Association, Boston, Massachusetts.

Blumberg, A., & Greenfield, W. (1986). The effective principal: Perspectives on school leadership (2nd ed.). Boston: Allyn & Bacon.

Bossert, S. T., Dwyer, D., Rowan, B., & Lee, G. V. (1982). The instructional management role of the principal. Educational Administration Quarterly, 18, 34-64.

Brookover, W. B., Beamer, L., Efthim, H., Lezotte, L., Miller, S., Passalacqua, J., & Tornatzy, L. (1982). Creating effective schools: An inservice program for enhancing school learning climate and environment. Holmes Beach, Florida: Learning Publications.

Chauvin, S. W. (1992). An exploration of principal change facilitator style, bureaucratic and professional orientations, and teacher receptivity to change. Unpublished doctoral dissertation, Louisiana State University, Baton Rouge, LA.

Chauvin, S. W., & Ellett, C. D. (1990). Initial perceptions of educators in Louisiana regarding the Louisiana teaching internship and statewide teacher evaluation programs. (Tech. Rep. No. 3). Baton Rouge: Louisiana State University, College of Education, Teaching Internship and Teacher Evaluation Projects.

Chauvin, S. W., & Ellett, C. D. (1991). A follow-up survey of Louisiana educators' perceptions of the Louisiana teaching internship and statewide teacher evaluation programs. (Tech. Rep. No. 17). Baton Rouge: Louisiana State University, College of Education, Teaching Internship and Teacher Evaluation Projects.

Chauvin, S. W., Ellett, C. D., Claudet, J. G., Loup, K. S., Lofton, G. G., & Hill, F. H. (1990). Reflecting on teaching and learning: A study of school level implementation of the STAR in nine schools. (Tech. Rep. No. 18). Baton Rouge: Louisiana State University, College of Education, Teaching Internship and Teacher Evaluation Projects.

Chauvin, S. W., Evans, R. L., & Ellett, C. D. (1992). Replacing lifetime certification with a renewable credential: Phase III of a survey of teacher educators' perspectives about the Louisiana teaching internship and statewide teacher evaluation projects. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, California.

Chauvin, S. W., Lofton, G. G., Loup, K. S., Evans, R. L., Hill, F. H., Claudet, J. G., & Ellett, C. D. (1991). Concepts and issues in effecting school-wide staff development: Results of a year-long study of school-level implementation of a classroom-based, professional development model in three schools. (Tech. Rep. No. 24). Baton Rouge: Louisiana State University, College of Education, Louisiana Teaching Internship and Teacher Evaluation Projects.

Chauvin, S. W., Loup, K. S., Claudet, J. G., Hill, F. H., & Lofton, G. G. (1991). Can a dinosaur block the view of a rainbow: Results of a nine school study. In S. Knight (Chair), Development of a system for induction and renewable teacher certification: Louisiana's System for teaching and learning assessment and review (STAR). Symposium presented at the annual meeting of the Southwest Educational Research Association, San Antonio, Texas.

Corbett, H. D., Firestone, W. A., & Rossman, G. B. (1987). Resistance to planned change and the sacred in school cultures. Educational Administrative Quarterly, 23(4), 36-59.

Cuban, L. (1990). Reforming again, again, again, and again. Educational Researcher, 19(1), 3-13.

Darling-Hammond, L. (1990). Instructional policy into practice: "The power of the bottom over the top." Educational Evaluation and Policy Analysis, 12(3), 233-241.

Duke, D. (1986). The aesthetics of leadership. Educational Administration Quarterly, 22, 7-27.

Edmonds, R. (1979). Effective schools for the urban poor. Educational Leadership, 37, 15-24.

Ellett, C. D., & Walberg, H. J. (1979). Principals' competency, environment, and outcomes. In H. J. Walberg (Ed.), Educational environments and effects: Evaluation, policy and productivity. (pp. 140-164) Berkeley, California: McCutchan Publishing.

Evans, R. L. (1988). Teachers' perception of principals' change facilitator styles in schools that differ according to effectiveness and socioeconomic context. Unpublished doctoral dissertation, University of New Orleans.

Fiedler, F. (1976). The contingency model and the dynamics of the leadership process. Advances in Experimental Social Psychology, 11, 60-112.

Firestone, W., & Corbett, H. D. (1988). Planned organizational change. In N. J. Boyan (Ed.), Handbook of Research on Educational Administration, (pp. 321-340). New York: Longman.

Foster, W. (1986a). Toward a critical theory of educational administration. In T. J. Sergiovanni & H. E. Corbally (Eds.), Leadership and organizational culture. (pp. 240-259). Chicago: University of Illinois Press.

Foster, W. (1986b). Paradigms and promises: New approaches to educational administration. Buffalo, New York: Prometheus Books.

Fullan, M. (1985). Change processes and strategies at the local level. The Elementary School Journal, 85(3), 391-421.

Fullan, M. (1990). Staff development, innovation, and institutional development. In Joyce, B. (Ed.), Changing school culture through staff development (pp.3-25). Alexandria, Virginia: Association for Supervision and Curriculum Development.

Giacquinta, J. B. (1973). The process of organizational change in schools. In F. B. Kerlinger (Ed.), Review of Research in Education. 1, 178-208.

Greenfield, W. D. (1982). Empirical research on principals: The state of the art. Paper presented at the annual meeting of the American Educational Research Association, New York City. ERIC Document Reproduction Service No. ED 224178).

Hall, G. E. (1988). The principal as leader of the change facilitating team. Journal of Research and Development in Education, 22(1), 79-89.

Hall, G. E. (1987). Strategic sense: The key to reflective leadership in school principals. Paper presented at the conference on Reflection in Teacher Education, Houston, Texas.

Hall, G. E., & George, A. (1988). Development of a framework and measure for assessing principal change facilitator style. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana.

Hall, G. E., & Hord, S. M. (1987). Change in schools: Facilitating the process. New York: State University of New York Press.

Hall, G. E., & Vandenberghe, R. (1987). The Change Facilitator Style Questionnaire. Greeley, Colorado: Concerns Based Systems International.

Hall, G. E., Rutherford, W. L., Hord, S. M., & Huling, L. L. (1984). Effects of three principal styles on school improvement. Educational Leadership, 41(5), 22-29.

Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behavior of principals. Elementary School Journal, 86(2), 217-247.

Halpin, A. W. (1966). Theory and research in administration. New York: Macmillan.

Halpin, A. W., & Croft, D. B. (1963). Organizational Climate Descriptive Questionnaire. From A. W. Halpin & D. B. Croft, The organizational climate of schools. Chicago: Midwest Administration Center, University of Chicago, pp. 122-24.

Hersey, P., & Blanchard, K. H. (1988). Management of organizational behavior: Utilizing human resources (5th ed). Englewood Cliffs, New Jersey: Prentice-Hall.

Hopkins, D. (1990). Integrating staff development and school improvement: A study of teacher personality and school climate. In B. Joyce (Ed.), Changing school culture through staff development (pp. 41-67). Alexandria, Virginia: Association for Supervision and Curriculum Development.

Hord, S. M. (1981). Analyzing administrator intervention behaviors. Paper presented at the annual meeting of the American Educational Research Association, Dallas, Texas.

House, R. J. (1971). A path-goal theory of leader effectiveness. Administrative Science Quarterly, 16, 321-338.

Huling, L. L., Hall, G. E., Hord, S. M., & Rutherford, W. L. (1983). A multidimensional approach for assessing implementation success. Paper presented at the annual meeting of the American Educational Research Association, Montreal.

Joyce, B. (1990). Changing school culture through staff development. Alexandria, Virginia: Association for Supervision and Curriculum Development.

LaMaster, S. U., Tobin, B. J., & Bowen, C. W. (1990). Making sense of an innovation: A qualitative study of the pilot implementation of LTIP/LTEP in three schools. (Tech. Rep. No. 19). Baton Rouge: Louisiana State University, College of Education, Teaching Internship and Teacher Evaluation Projects.

Leithwood, K. A., & Montgomery, D. J. (1982). The role of elementary school principals in program improvement. Review of Educational Research, 52, 309-339.

Lightfoot, S. L. (1983). The good high school: Portraits of character and culture. New York: Basic Books.

Lipham, J. (1988). Getzel's models in educational administration. In N. J. Boyan (Ed.), Handbook of Research on Educational Administration. New York: Longman.

Messick, S. (1989). Validity. In R. L. Linn (Ed.), Educational Measurement (3rd ed.). National Council on Measurement in Education and American Council on Education. New York: Macmillan.

Murphy, J. (1989). Educational reform in the 1980s: Explaining some surprising success. Educational Evaluation and Policy Analysis, 11, 209-211.

Murphy, J. (1988). Methodological, measurement and conceptual problems in the study of instructional leadership. Educational Evaluation and Policy Analysis, 10(2), 117-139.

Pitner, N. (1988). The study of administrator effects and effectiveness. In N. J. Boyan (Ed.), Handbook of Research on Educational Administration, (pp. 99-122). New York: Longman.

Richardson, V. (1990). Significant and worthwhile change in teaching practice. Educational Researcher, 19(7), 10-18.

Rutherford, W. L. (1981). The interventions and plans principals make when facilitating change. Paper presented at the annual meeting of the Southwest Educational Research Association, Dallas, Texas.

Rutherford, W. L. (1988). Distinguishing three change facilitator styles from an analysis of principal interventions. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana.

SAS Institute, Inc. (1985). SAS user's guide: Statistical applications, version 5 edition. Cary, NC: SAS Institute.

Schon, D. A. (1986). Leadership as reflection-in-action, In T. J. Sergiovanni & J. E. Corbally (Eds.) Leadership and organizational culture: New perspectives on administrative theory and practice (pp. 36-63). Chicago: University of Illinois Press.

Seibel, E. (1986). Principals' change facilitator style: Its relation to school climate and to student achievement. Unpublished doctoral dissertation, Richmond: Virginia Commonwealth University.

Sergiovanni, T. J. (1986). Leadership as cultural expression, In T. J. Sergiovanni & J. E. Corbally (Eds.) Leadership and organizational culture: New perspectives on administrative theory and practice (pp. 105-114). Chicago: University of Illinois Press.

Sergiovanni, T. J. (1987). The principalship: A reflective practice perspective. Boston: Allyn and Bacon.

Smith, W. F., & Andrews, R. L. (1989). Instructional leadership: How principals make a difference. Alexandria, Virginia: Association for Supervision and Curriculum Development.

SPSS, Inc. (1988). SPSS^x: User's guide (3rd ed.). Chicago: SPSS, Inc.

Tannebaum, R., & Schmidt, W. H. (1987). How to choose a leadership pattern. In L. E. Boone & D. D. Bowan (Eds.) The great writings in management and organizational behavior (2nd ed.) (pp. 261-278). New York: Random House.

Thomas, M. A. (1978). A study of alternatives in American education, Vol. II: The role of the principal. Santa Monica, CA: Rand Corp.

Tobin, K. (1990). A qualitative study and synthesis of issues and concerns in the Louisiana Teaching Internship and Statewide Teacher Evaluation Programs: Learning from pilot program implementation in nine schools. (Tech. Rep. No. 15). Baton Rouge: Louisiana State University, College of Education, Louisiana Teaching Internship and Statewide Teacher Evaluation Projects.

Vandenberghe, R. (1988). Development of a questionnaire for assessing principal change facilitator style. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana.

Waugh, R. F., & Punch, K. F. (1987). Teacher receptivity to systemwide change in the implementation stage. Review of Educational Research, 57, 237-254.

Wimpelberg, R. K., Teddlie, C., & Stringfield, S. (1989). Sensitivity to context: The past and future of effective schools research. Educational Administration Quarterly, 25(1), 82-107.

APPENDIX A:

Conceptual Definitions Related to Principal Change Facilitator Style

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Three change facilitator styles, Initiator, Manager and Responder, have been operationally described by Hall, Rutherford, Hord and Huling (1984):

Initiators have clear, decisive long-range policies and goals that transcend but include implementation of the current innovation. They tend to have very strong beliefs about what good schools and teaching should be like and work intensely to attain this vision. Decisions are made in relations to their goals for the school and in terms of what they believe to be best for students, which is based on current knowledge of classroom practice. Initiators have strong expectations for students, teachers and themselves. They convey and monitor these expectations through frequent contacts with teachers and clear explication of how the school is to operate and how teachers are to teach. When they feel it is in the best interest of their school, particularly the students, Initiators will seek changes in district programs or policies or they will reinterpret them to suit the needs of the school. Initiators will be adamant but not unkind, they solicit input from staff and then decisions are made in terms of the goals of the school, even if some are ruffled by their directness and high expectations.

Managers represent a broader range of behaviors. They demonstrate both responsive behaviors to situations or people and they also initiate actions in support of the change effort. The variations in their behavior seem to be linked to their rapport with teachers and central office staff as well as how well they understand and buy into a particular

change effort. Managers work without fanfare to provide basic support to facilitate teachers' use of an innovation. They keep teachers informed about decisions and are sensitive to teacher needs. They will defend their teachers from what are perceived as excessive demands. When they learn that the central office wants something to happen in their school they then become very involved with their teachers in making it happen. Yet, they do not typically initiate attempts to move beyond the basics of what is imposed. Responders place heavy emphasis on allowing teachers and others the opportunity to take the lead. They believe their primary role is to maintain a smooth running school by focusing on traditional administrative tasks, keeping teachers content and treating students well. They view teachers as strong professionals who are able to carry out their instructional role with little guidance. Responders emphasize the personal side of their relationships with teachers and others. Before they make decisions they often give everyone an opportunity to have input so as to weigh their feelings or to allow others to make the decision. A related characteristic is the tendency toward making decisions in terms of immediate circumstances rather than in terms of longer range instructional school goals. This seems to be due in part to their desire to please others and in part to their more limited vision of how their school and staff should change in the future (pp.23-24).

Hall and George (1988) and Hall and Vandenberghe (1987) provide an measurement framework for identifying principal change facilitator style based upon teachers perceptions of the principal's day-to-day behavior. The Change Facilitator Style Questionnaire (CSFQ) (Hall & Vandenberghe, 1987) is completed by teachers and is used to obtain data according to three

dimensions, each measured by a bi-polar pair of scales. These are briefly described in Hall and George (1988) as follows:

I. Concern for People

The Concern for People dimension is measured by two bi-polar scales: social/informal and formal/meaningful. At the social/informal extreme of this bipolar dimension, the principal is involved in discussions with clients (e.g., teachers) that are primarily concerned with moment to moment topics and many of these topics are unrelated to work. At the formal/meaningful end of the dimension, principal discussions are characterized as task-related and focused on school priorities, teaching and learning and other substantial issues. While personal concerns and feelings are not ignored, they are addressed in personally meaningful ways.

II. Organizational Efficiency

Organizational efficiency is the second dimension identified in the CFSQ and is measured by the bi-polar scales of administrative efficiency and trust in others. In this dimension a principal's administrative focus is conceptualized as being on a continuum that ranges from high "administrative efficiency", characterized by clear procedures, available resources and smooth operational function, to high" trust in others" that is characterized by casual, informal and less consistent articulation of procedures and delegation of tasks.

III. Strategic Sense

This third dimension of change facilitator style is measured by the two bi-polar scales named Day to Day and Vision and Planning. To varying degrees, principals are

able to retain an image of long term goals and their relationships to daily, weekly and monthly activities. At the day to day extreme of this dimension, principals are characterized as being highly concerned with the present moment and lack the foresight and anticipation of future consequences and developments within the organizational context. On the other hand, the opposite extreme of the dimension represented by vision and planning is indicative of long-term vision that is integrated with how day to day activities serve as means to the accomplishment of long term goals and desired ends.